#### **BUILDING STANDARDS COMMISSION**

2525 Natomas Park Drive, Suite 130 Sacramento, California 95833-2936 (916) 263-0916 FAX (916) 263-0959

April 8, 2014

Bret Caulder Building Official City of San Juan Capistrano 32400 Paseo Adelanto San Juan Capistrano, CA 92675

RE: Ordinance #1005

Dear Mr. Caulder:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on April 1, 2014.

Our review finds the submittal to contain one ordinance modifying provisions of the 2013 California Building Standards Code in Title 24, California Code of Regulations (code), and express findings complying with Health and Safety Code §§17958.7 and 18941.5. The code modification is accepted for filing and is enforceable. This letter attests only to the satisfaction of the cited law for filing of local code amendment supported by an express finding with the Commission. The Commission is not authorized by law to evaluate the merit of the code modification or the express finding.

Local modifications to the code are specific to a particular edition of the code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the code is published.

On a related matter, should your city receive and ratify Fire Protection District ordinances making modifications to the code, be advised that Health and Safety Code §13869.7(c) requires such ratified ordinances and express findings to be filed with the Department of Housing and Community Development, Division of Codes and Standards, State Housing Law Program, rather than this Commission. Also, ordinances making modifications to the energy efficiency standards of the code may require approval from the California Energy Commission pursuant to Public Resources Code §25402.1(h)(2).

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

Enrique M. Rodriguez

Associate Construction Analyst

CC:

Chron

Local Filings

32400 PASEO ADELANTO SAN JUAN CAPISTRANO, CA 92675 (949) 493-1171 (949) 493-1053 FAX www.sanjuancapistrano.org



MEMBERS OF THE CITY COUNCIL

SAM ALLEVATO ROY L. BYRNES, M.D. LARRY KRAMER DEREK REEVE JOHN TAYLOR

March 27, 2014

California Building Standards Commission 2525 Natomas Park Drive, Suite 130 Sacramento, California 95833-2936

RE: City of San Juan Capistrano, Building Adoption Ordinance

The City of San Juan Capistrano has adopted the current Building, Residential, Green Building Standards, Plumbing, Mechanical, and Electrical Codes of the State of California.

The City of San Juan Capistrano has recommended changes and modifications to the Codes and have advised that certain said changes and modifications to the 2013 Editions of the California Building and Residential Codes are reasonably necessary due to local conditions in the City of San Juan Capistrano and have further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Code or are reasonably necessary to safeguard life and property within the City of San Juan Capistrano.

The enclosed City Ordinance is for your files.

If additional information is desired please telephone this office at (949) 234-4568.

Sincerely,

Bret Caulder, CBO
Building Official
City of San Juan Capistrano

Attachment: Ordinance 1005

#### **ORDINANCE NO. 1005**

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAN JUAN CAPISTRANO, CALIFORNIA, AMENDING SPECIFIC SECTIONS OF TITLE 8 OF THE SAN JUAN CAPISTRANO MUNICIPAL CODE BY ADOPTING THE 2013 EDITIONS OF THE CALIFORNIA BUILDING STANDARDS CODE AND RELATED MODEL CODES WITH APPENDICES AND AMENDMENTS THERETO

WHEREAS, the California Building Standards Commission ("Commission") recently adopted new amendments to the California Building Standards Codes; and

WHEREAS, California Health & Safety Code Sections 17958 et seq., and 18941.5 authorize cities and counties to modify the California Building Standards Codes by adopting more restrictive standards and modifications if such standards and modifications are accompanied by express findings that they are reasonably necessary because of local climatic, geological, or topographical conditions; and

WHEREAS, based upon the recommendations of the Fire Marshal and the Building Official, the City Council finds that the proposed amendments to the 2013 California Building Standards Code set forth in this Ordinance are more restrictive than the standards adopted by the California Building Standards Commission, would decrease the number of potential incidence of property damage, injury and death due to fires and earthquakes, and are reasonable and necessary to mitigate local climatic, geological or topographical conditions.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAN JUAN CAPISTRANO DOES HEREBY ORDAIN AS FOLLOWS:

## Section 1. Adoption of the California Building Standards Codes.

Section 8-2.01 of Chapter 2, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2010 California Building Code is hereby amended to read as follows:

## "Section 8-2.01 Adoption of the 2013 California Building Codes.

For the purpose of prescribing regulations for erecting, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment use, height, and area of buildings and structures, the following building codes subject to the modifications set forth in this Chapter, are hereby adopted: the California Building Code, 2013 Edition; the California Residential Code, 2013 Edition; the California Green Building Standards Code, 2013 Edition; the California Plumbing Code, 2013 Edition; the California Mechanical Code, 2013 Edition; the California Electrical Code, 2013 Edition; the California Fire Code, 2013 Edition; the California Energy Code, 2013 Edition. The provisions of these Building Codes as amended by this chapter shall constitute the Building Regulations of the City of San Juan Capistrano. Where the California Code of Regulations and State Building Standards Code of Regulations differ from any sections of the Building Codes, State regulations shall prevail over the Building Codes.

One (1) copy of all the above codes and standards therefor are on file in the office of the building official pursuant to Health and Safety Code Section 18942 (d) (1) and are made available for public inspection.

## Section 2. Amendments, Additions and Deletions to 2013 California Building Code.

Section 8-2.02 of Chapter 2, Title 8, of the San Juan Capistrano Municipal Code entitled "Amendments to the 2010 California Building Code including Appendix Chapter 1 is hereby amended to read as follows:

"Section 8-2.02 Amendments to 2013 California Building Code.

Section 100 "Division II Scope and Administration" is hereby amended to read as follows:

1. Subsection 101.2 "Scope" is hereby amended to add a second paragraph and amend the exception that reads:

"The provisions of these codes shall apply to and affect all of the territory of the City of San Juan Capistrano, except work located primarily in a public way; public utility towers and poles; mechanical equipment not specifically regulated in these codes; hydraulic flood control structures; facilities for the production, generation, storage or transmission of water or electrical energy by a local agency; and except as exempted by these codes."

2. Subsection 105.2 "Work exempt from permit" is hereby amended to read as follows:

#### Building.

- One-story detached accessory buildings used as tool and storage sheds, playhouses and similar uses and structures such as portable shade cloth structures, provided the floor area does not exceed 120 square feet. Such structures must comply with the setback and height requirements of the City Zoning Ordinance and the Fire Code.
- 2. Masonry or concrete fences not over 36 inches in height measured from the top of footing to top of wall, and all other fences (wood, vinyl, wrought iron, etc.) not over 36 inches in height above lowest adjacent grade and any fence located with the zoning front yard setback distance not over 36 inches high.
- 3. Oil derricks.
- 4. Retaining walls that are not over 48 inches in height measured from the bottom of footing to top of wall unless supporting a surcharge, impounding Class I, II or II-A liquids or located at the top or bottom of a slope.
- 5. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2:1.
- 6. Decks, platforms or similar structures, walkways, sidewalks and driveways not more than 30 inches above adjacent grade, and not over any basement or story below and are not part of an accessible route. Note:

All parking lot re-stripping, re-sealing and/or re-paving require permits and approval to verify compliance with disabled access requirements and City zoning regulations.

- 7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work that does not involve electrical, mechanical or plumbing work.
- 8. Temporary motion picture, television and theater stage sets and scenery.
- 9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 18 inches deep, do not exceed 5,000 gallons and are installed entirely above ground.
- 10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
- 11. Swings and other playground equipment accessory to detached one- and two-family dwellings.
- 12. Window awnings supported by an exterior wall that do not project more than 54 inches from the exterior wall and do not require additional support of Group R-3 and U occupancies.
- 13. Non fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches in height.
- 14. Radio and television antenna, flagpoles not over twelve (12) feet in height measured from grade.

Unless otherwise exempted, separate plumbing, electrical and mechanical permits will be required for the above-exempted items.

- 3. Subsection 105.3.2 "Time limitation of application" is hereby amended to read as follows:
- "105.3.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless a permit has been issued. The building official is authorized to grant, in writing, one extension of time, for a period not more than 180 days."
- 4. Subsection 105.5 "Expiration" is hereby amended to read in its entirety as follows:
- "105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work commenced. Before such work can be recommenced after a permit expires, a new permit shall first be obtained to do so, and a fee therefore shall be one half the amount required for a new permit for such work, provided no changes have been made or will be made

in the original plans and specifications for such work, and provided further that such suspension or abandonment has not exceeded one year. In order to renew action on a permit after expiration, the permittee shall pay a new full permit fee.

The building official is authorized to grant, in writing, one extension of time, for a period not more than 180 days. Any permittee holding an unexpired permit may apply for an extension of the time within which work may commence under that permit when the permittee is unable to commence work within the time required. The extension shall be requested in writing prior to the permit expiring and show justifiable cause demonstrating that circumstances beyond the control of the permittee have prevented action from being taken. No permit shall be extended more than once."

- 5. **Subsection 107.1 "General"** is hereby amended to add a second paragraph that reads:
- "Subsection 107.1. General.

  Soil report, prepared by an Engineer licensed by the State to practice by such, shall be submitted at the time of permit application. Soil report is required for all new construction and additions. The Building Official may

waive the requirement of soil report if it is found that the scope of work applied for is not necessary to have a soil report."

- 6. Subsection 107.3 "Examination of documents" is hereby amended to add a second paragraph that reads:
- "Subsection 107.3. Examination of Documents.

  When submittal documents are required by Section 107.1, a plan review fee shall be paid at the time of submitting the documents for plan review. Said plan review fees are separate fees from the permit fees specified in Section 109.2 and are in addition to the permit fees. Said plan review fee shall be as set forth in the City Council Fee Resolution."
- 7. Subsection 107.5 "Retention of construction documents", is hereby amended to add a second paragraph that reads:
- "The approved plan, permit application and inspection card and other construction documents required by the Building Official shall be imaged after the final inspection and will be a permanent record in the City. The applicant shall pay the cost of imaging at the time of permit."
- 8. Subsection 109.2 "Schedule of permit fees" is hereby amended to add a sentence at the end of the paragraph that reads:
- "The fee for each permit shall be as set forth in the City Council Fee Resolution unless otherwise specified by the code."
- 9. **Subsection 109.3 "Building Permit Valuations"** is hereby amended to add a second paragraph that reads:

"The Building Official shall make the determination of value or valuation under any provisions of this code. The valuation shall be determined by using rational methods established by the Building Official that reasonably establish the construction value or the contract price of the actual construction cost.

10. Section 109.4 "Work commencing before permit issuance" is hereby amended to add a second paragraph that reads:

"An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by law."

11. Subsection 109.6 "Refunds" is hereby amended to read in its entirety;

"109.6 Refunds.

The building official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

The building official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review has been paid is withdrawn or canceled before any plan reviewing is done.

The building official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of payment."

- 12. Section 109 "Fees" is hereby amended by adding a new Subsection 109.7 as follows:
- "109.7 Fees/Deposit. The Building Official may require a deposit from the applicant for a certain project or work in order to secure the request for final inspection approvals from the applicant or the repairing of damaged City properties during the period of construction. The deposit money will be refunded to the applicant when the final inspections are approved or the damages are repaired to the satisfaction of the City. The deposit amount shall not be more than twice the permit fee."
- 13. **Section 110 "Inspections"** is hereby amended by adding a new Subsection 110.7 as follows:
- "110.7 Re-inspections. A re-inspection fee may be assessed for each inspection or re-inspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

This subsection is not to be interpreted as requiring re-inspection fees the first time a job is rejected for failure to comply with the requirements of this Code, but as controlling the practice of calling for inspections before the job is ready for such inspection or re-inspection.

Re-inspection fees may be assessed when the inspection record card is not posted or otherwise made available on site; the approved plans are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the Building Official.

To obtain a re-inspection, the applicant shall pay the re-inspection fee as established by the City Council Fee Resolution.

In instances where re-inspection fees have been assessed, no additional inspections will be performed until the required fees have been paid."

14. Subsection 111.1 "Use and occupancy" is hereby amended to read as follow:

"No building or structure shall be used or occupied, and no change in the existing occupancy classification of any building or structure or portion thereof shall be made until the Building Official has issued a certificate of occupancy for said building or structure in accordance with the provisions of section 111.2. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the City. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the City shall not be valid."

- 15. Subsection 111.2 "Certificate issued" is hereby amended to read as follow and section 111.3 "Temporary Occupancy" is deleted in its entirety:
- (a) The Building Official shall not issue a certificate of occupancy for any building or structure subject to this code when the Building Official has found violation(s) of any municipal code, county code or applicable state law provision related to any form of building or grading activity occurring on the subject property.

(b) If the Building Official determines that a certificate of occupancy may be issued as in conformance with the requirements of this Code, the certificate shall contain the following:

- 1. The building permit number;
- 2. The address of the building;
- 3. The name and address of the owner;
- 4. A description of that portion of the building for which the C of O is issued;
- A statement that the described portion of the building has been inspected for Compliance with the requirements of this code for the group and division of Occupancy and the use;
- 6. The name of the Building Official.

- (c) Exception: A certificate of occupancy may be issued by the Building Official in those instances where the Building Official finds and determines that the building or structure is otherwise completed but not all zoning conditions of approval have been satisfied and: i) occupancy will not otherwise constitute a threat to the public health and safety; ii) remaining work constitutes a very minor portion of the project; iii) the remaining work is secured by the posting of appropriate surety performance bonding as approved by the Building Official; iv) the applicant shall pay a required fee to process the exception application. This exception is not applicable where the work on the structure or building has not satisfied all requirements of this Building Code.
- 16. Subsection 111.4 "Revocation" is hereby amended to read as follows:

The Building Official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portions thereof is in violation of any City ordinance or regulation or any of the provisions of this code."

**Note:** Many of the following changes are made to various fire safety regulations set forth in the following sections of the 2013 California Building Code:

Adopt Chapter 7A Materials and Construction Methods for Exterior Wildfire Exposure in its entirety with the following amendments:

**710A.3.2** Detached accessory structures within 50 feet of an applicable building shall comply with the requirements of this section.

**710A.4 Requirements.** Accessory structures shall be constructed of non-combustible or ignition-resistant materials.

17. Adopt Chapter 9 "Fire Protection Systems" in its entirety with the following amendments:

Section 903.2 Where required is hereby revised as follows:

903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in this section and in Section 903.2 of the California Fire Code as amended by the City of San Juan Capistrano as follows:

New buildings: In addition to the requirements of section 903.2.1 through 903.2.19, approved automatic sprinkler systems in new buildings and structures shall be provided as follows (Exception: Group R Detached one- two-family dwellings and townhouses as required by section 903.2.8):

i. Throughout all Groups A, I, E, and H Occupancies

ii. Throughout all Group B, F, M, and S Occupancies exceeding 1,000 square feet

iii. Throughout all Group U-1 Occupancies exceeding 6,000 square feet

For the purposes of this section, fire walls shall not define separate buildings.

Alteration: When the floor area of the Alteration within any two-year period exceeds 75% of area of the existing structure and the alteration includes structural modifications other than seismic upgrade.

Addition: Sprinkler protection shall be provided throughout the entire building when:

- a) Existing non sprinkled building less than 5,000 ft<sup>2</sup>: where 20% or more is added and the gross floor area exceeds 5,000 square feet.
- b) Existing non sprinkled building equal or greater than 5,000 ft<sup>2</sup>: where more than 1,000 ft<sup>2</sup> is added.
- Fire sprinklers shall be provided in additions to an existing building that has fire sprinklers installed.

**Subsection 903.2.8** of Section 903 of CBC is hereby amended to read in its entirety as follows:

903.2.8 Group R. An automatic sprinkler system installed in accordance with Subsection 903.3 of Section 903 of this code and Subsection 903.2.8 of Section 903 of the California Fire Code as amended by the City of San Juan Capistrano shall be provided throughout all buildings with a Group R fire area as follows:

**New buildings:** An automatic sprinkler system shall be installed throughout all new buildings.

**Existing buildings:** An automatic sprinkler system shall be installed throughout when one of the following conditions exists:

a. When an addition is 33% or more of the existing building area, as defined in Section 202, and greater than 1000 square feet (92.903 m²) within a two year period; or

**Exception:** When demonstrated to the fire code official that the hydraulic demand of the fire sprinkler system requires a water meter upgrade solely for the fire sprinkler system, and that upgrade requires replacement of the domestic lateral feed from the water main to the water meter solely for the fire sprinkler system, fire sprinklers shall not be required.

b. An addition when the existing building is already provided with automatic sprinklers; or.

When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

#### Exceptions:

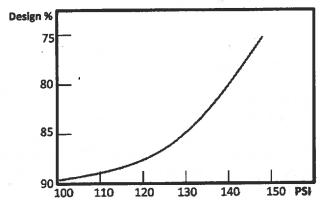
- 1. Existing Group R-3 occupancies converted to Group R-3.1 occupancies not housing bedridden clients, not housing non ambulatory clients above the first floor and not housing clients above the second floor.
- 2. Existing Group R-3 occupancies converted to Group R-3.1 occupancies housing only one bedridden client and complying with Section 425:8.3.3.
- 3. Pursuant to Health and Safety Code Section 13113 occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.
- 4. Pursuant to Health and Safety Code Section 13143.6 occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).

Section 903.3.5.3 Hydraulically calculated systems is hereby added as follows:

903.3.5.3 Hydraulically calculated systems. The design of hydraulically calculated fire sprinkler systems shall not exceed 90% of the water supply capacity

**Exception:** When static pressure exceeds 100 psi, and required by the Fire Code Official, the fire sprinkler system shall not exceed water supply capacity specified by Table 903.3.5.3

TABLE 903.3.5.3
Hydraulically Calculated Systems



Section 903.4 Sprinkler system supervision and alarms is hereby revised by modifying item 1, deleting item 3 and 5, and renumbering the Exceptions as follows:

- 1. Automatic sprinkler systems protecting one- and two-family dwellings.
- 2. Limited area systems serving fewer than 20 sprinklers.
- 3. Jockey pump control valves that are sealed or locked in the open position.
- 4. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
- 5. Trim valves to pressure switches in dry, pre-action and deluge sprinkler systems that are sealed or locked in the open position.

Section 905.4 Location of Class I standpipe hose connections is hereby amended by adding item 7 as follows:

7. The centerline of the 2.5 inches (63.5 mm) outlet shall be no less than 18 inches (457.2 mm) above and no more than 24 inches above the finished floor.

Section 907.3.1 Duct smoke detectors is hereby amended as follows:

907.3.1 Duct smoke detectors. Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is installed. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a constantly attended location and shall perform the intended fire safety function in accordance with this code and the California Mechanical Code. Duct smoke detectors shall not be used as a substitute for required open area detection.

#### Exception:

In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

#### Section 907.6.5 Monitoring is revised as follows

**907.6.5 Monitoring.** Fire alarm systems required by this chapter or by the California Building Code shall be monitored by an approved supervising station in accordance with NFPA 72, this section, and per Orange County Fire Authority Guideline "New and Existing Fire Alarm & Signaling Systems".

#### 18. Chapter 15 Roof Assemblies and Rooftop Structures

**Table 1505.1** is hereby amended to read as follows:

# TABLE 1505.1° MINIMUM ROOF COVERING CLASSIFICATIONS TYPES OF CONSTRUCTION

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
Α	Α	Α	Α	Α	A	Α	Α	Α

For SI: 1 foot = 304.8 mm, 1 square foot =  $0.0929 \text{ m}^2$ .

a. Unless otherwise required in accordance with Chapter 7A.

#### Section 1505.1.3 is amended to read as follows:

1505.1.3 Roof coverings within all other areas. The entire roof covering of every existing structure where more than 10 percent (10%) of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A.

Section 1505.5 Non-classified roofing is amended, by the deletion of the entire section.

Section 1505.7 Special purpose roof is amended, by the deletion of the entire section.

#### (Next 7 sections are amendments to Grading)

Section 8-2.06 Excavation and Grading is amended to read as follows:

Section 1804, of the 2013 California Building Code, is hereby amended to read

as follows:

Permits Required.

Section 1804.7 (the rest of the section is unchanged).

## Section 8-2.07 Grading permit requirement is amended to read as follows:

Section 1804.8, of the 2013 California Building Code, is hereby added to section 1804 to read as follows: (the rest of the section is unchanged).

#### Section 8-2.08 Bonds is amended to read as follows:

Section 1804, of the 2013 California Building Code, is hereby amended to read as follows:

Section 1804.9 (the rest of the section is unchanged).

## Section 8-2.10 Drainage, terracing, and on-site improvement is amended to read as follows:

Section 1804, of the 2013 California Building Code, is hereby amended to read as follows:

Section 1804.10 (the rest of the section is unchanged).

## Section 8-2.11 Grading inspection is amended to read as follows:

Section 1804, of the 2013 California Building Code, is hereby amended to read as follows:

Section 1804.11 (the rest of the section is unchanged).

## Section 8-2.12 Completion of work is amended to read as follows:

Section 1804, of the 2013 California Building Code, is hereby amended to read as follows:

Section 1804.12 (the rest of the section is unchanged).

## Section 8-2.13 Import or export is amended to read as follows:

Section 1804, of the 2013 California Building Code, is hereby amended to read as follows:

Section 1804.13 (the rest of the section is unchanged)

## 19. Chapter 31 Special Construction

## Section 3109.4.4.1is amended by adding the following definition:

PRIVATE POOL, is any constructed pool, permanent or portable, and over 18 inches deep which is intended for non-commercial use as swimming pool by not more than three owner families and their guests.

**3109.4.4.2** is hereby modified by deleting the first paragraph in its entirety and a new paragraph is substituted to read as follows:

**3109.4.4.2** Construction permit; safety features required. Commencing January 1, 2007, except as provided in Section 3109.4.4.5, whenever a construction permit is issued for construction of a new private pool at a residence, it shall have an enclosure complying with 3109.4.4.3.

#### Chapter 35

Chapter 35 Referenced Standards is hereby adopted and revised as follows:

NFPA 13, 2013 Edition, Installation of Sprinkler Systems is hereby amended as follows:

#### Section 6.8.3 is hereby revised as follows:

**6.8.3** Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½" inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the fire code official. The size of piping and the number of inlets shall be approved by the fire code official. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 gpm (including inside hose stream demand) or greater, or a standpipe system is included, four 2 ½" inlets shall be provided.

#### Section 8.3.3.1 is hereby revised as follows:

- **8.3.3.1.** When fire sprinkler systems are installed in shell buildings of undetermined use (Spec Buildings) other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the fire sprinkler plan is submitted. Sprinklers in light hazard occupancies shall be one of the following:
  - (1) Quick-response type as defined in 3.6.4.7
  - (2) Residential sprinklers in accordance with the requirements of 8.4.5
  - (3) Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers
  - (4) Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems

#### Section 8.17.1.1.1 is hereby added as follows

**8.17.1.1.1 Residential Waterflow Alarms.** A local water-flow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system, where provided. Group R occupancies not requiring a fire alarm

system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be minimum of 15 DBA above the average ambient sound or a minimum of 75 DBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

## Section 11.1.1.2 is hereby added as follows:

11.1.2 When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction(s) in density or design area. Warehouse fire sprinkler systems shall be designed to Figure 16.2.1.3.2 (d) curve "G". Use is considered undetermined if a specific tenant/occupant is not identified at the time the sprinkler plan is submitted. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.

#### Section 11.2.3.1.1.1 is hereby added as follows:

11.2.3.1.1.1 The available water supply for fire sprinkler system design shall be determined by one of the following methods, as approved by the Fire Code Official:

- 1) Subtract the project site elevation from the low water level for the appropriate pressure zone and multiply the result by 0.433;
- 2) Use a maximum of 40 psi, if available;
- 3) Utilize the Orange County Fire Authority water-flow test form/directions to document a flow test conducted by the local water agency or an approved third party licensed in the State of California.

## **Section 23.2.1.1** is hereby revised as follows:

**Section 23.2.1.1** Where a waterflow test is used for the purposes of system design, the test shall be conducted no more than 6 months prior to working plan submittal unless otherwise approved by the authority having jurisdiction.

NFPA 13R 2013 Edition, Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby amended as follows:

## **Section 6.16.1** is hereby revised as follows:

**6.16.1** A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2010

California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

NFPA 13D 2013 Edition, Standard for the Installation of Sprinkler Systems in Oneand Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

Section 4.1.3 is hereby added as follows:

#### 4.1.3 Stock of Spare Sprinklers

#### Section 4.1.3.1 is hereby added as follows:

**4.1.3.1.** A supply of at least two sprinklers for each type shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

## Section 4.1.3.2 is hereby added as follows:

**4.1.3.2** The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

## Section 4.1.3.3 is hereby added as follows:

**4.1.3.3** The sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100 °F (38°C).

## Section 4.1.3.4 is hereby added as follows:

**4.1.3.4** A special sprinkler wrench shall be provided and kept in the cabinet to be used in the removal and installation of sprinklers. One sprinkler wrench shall be provided for each type of sprinkler installed.

## Section 7.1.2 is hereby revised as follows:

7.1.2 The system piping shall not have a separate control valve unless supervised by a central station, or remote station alarm service

## Section 7.6 is hereby deleted in its entirety and replaced as follows:

7.6 Alarms. Exterior alarm indicating device shall be listed for outside service

and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location is subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

#### Exception:

- 1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
- 2. When smoke detectors specified under CBC Section 907.2.11 are used to sound an alarm upon waterflow switch activation.

National Fire Protection Association (NFPA) 14, 2013 Edition, Installation of Standpipe and Hose Systems is hereby amended as follows:

Section 7.3.1.1 is hereby is deleted in its entirety and replaced as follows:

**7.3.1.1** Hose Connection Height Class I and III Standpipe hose connections shall be unobstructed and shall be located not less than 18 inches, or more than 24 inches above the finished floor. Class II Standpipe hose connections shall be unobstructed and shall be located not less than 3 feet or more than 5 feet above the finished floor.

National Fire Protection Association (NFPA) 24, 2013 Edition, Installation of Private Fire Service Mains and Their Appurtenances is hereby amended as follows:

Section 6.2.1.1 is hereby added as follows:

**6.2.1.1** The closest upstream indicating valve to the riser shall be painted OSHA red.

**Section 6.2.11 (5)** is hereby deleted without replacement and (6) and (7) renumbered:

- (5) Control Valves installed in a fire-rated room accessible from the exterior.
- (6) Control valves in a fire-rated stair enclosure accessible from the exterior as permitted by the authority having jurisdiction.

Section 6.3.3 is hereby added as follows:

**Section 6.3.3** All post indicator valves controlling fire suppression water supplies shall be painted OSHA red.

#### Section 10.1.6.3 is hereby added as follows:

10.1.6.3 All ferrous pipes shall be coated and wrapped. Joints shall be coated and wrapped after assembly. All fittings shall be protected with an 8-mil polyethylene tube. The ends of the tube shall extend past the joint by a minimum of 12 inches and be sealed with 2 inch wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

Exception: 304 or 316 Stainless Steel pipe and fittings

#### Section 10.3.6.2 is hereby revised as follows:

**10.3.6.2** All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material, prior to poly-tube, and after installation.

**Exception:** Bolted joint accessories made from 304 or 316 stainless steel.

#### Section 10.3.6.3 is hereby added as follows:

10.3.6.3 All bolts used in pipe-joint assembly shall be 316 stainless steel.

#### Section 10.6.3.1 is hereby revised as follows:

**10.6.3.1** Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 18 inches, as measured from the interior of the exterior wall. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or comply with 10.6.2.

#### Section 10.6.4 is hereby revised as follows:

**10.6.4** Pipe Joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints.

#### Section 3. Adoption of the 2013 California Electrical Code.

Section 8-3.01 of Chapter 3, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2010 California Electrical Code" is hereby amended to read as follows:

#### "Section 8-3.01 Adoption of the 2013 California Electrical Code.

The 2013 California Electrical Code, based on the 2011 National Electrical Code as published by the National Fire Protection Association, is hereby adopted by reference and made part of this code.

#### Section 4. Adoption of the 2013 California Mechanical Code.

Section 8-4.01 of Chapter 4, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2010 California Mechanical Code" is hereby amended to read as follows:

#### "Section 8-4.01 Adoption of the 2013 California Mechanical Code.

The 2013 California Mechanical Code, based on the 2012 Uniform Mechanical Code

as published by the International Association of Plumbing and Mechanical Officials, is hereby adopted by reference and made part of this code.

## Section 5. Adoption of the 2013 California Plumbing Code.

Section 8-5.01 of Chapter 5, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2010 California Plumbing Code" is hereby amended to read as follows:

## Section 8-5.01 Adoption of the 2013 California Plumbing Code.

The 2013 California Plumbing Code, based on the 2012 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials, is hereby adopted by reference and made part of this code.

## Section 6. Adoption of the 2013 California Energy Code.

Section 8-15.01 of Chapter 15, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2010 California Energy Code" is hereby amended to read as follows:

## Section 8-15.01 Adoption of the 2013 California Energy Code.

The 2013 California Energy Code, based on the 2012 Energy Code as published by the California Energy Commission, is hereby adopted by reference and made part of this code.

## Section 7. Adoption of the 2013 California Fire Code.

Section 8-10.01 of Chapter 10, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2010 California Fire Code" is hereby amended to read as follows:

## Section 8-10.01 Adoption of the 2013 California Fire Code.

The 2013 California Fire Code, based on the 2012 International Fire Code as published by the International Code Council (ICC), is hereby amended to read as follows:

Chapter 1 Scope and Administration is adopted in its entirety with the following amendments:

## Section 109.4 Violation penalties is hereby revised as follows:

109.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of either a misdemeanor, infraction or both as prescribed in Section 109.4.2 and 109.4.3. Penalties shall be as prescribed in local ordinance. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

## Sections 109.4.2 Infraction is hereby added as follows:

**109.4.2 Infraction.** Except as provided in Section 109.4.3, persons operating or maintaining any occupancy, premises or vehicle subject to this code that shall

permit any fire or life safety hazard to exist on premises under their control shall be guilty of an infraction.

#### Sections 109.4.3 Misdemeanor is hereby added as follows:

**109.4.3 Misdemeanor**. Persons who fail to take immediate action to abate a fire or life safety hazard when ordered or notified to do so by the chief or a duly authorized representative, or who violate the following sections of this code, shall be guilty of a misdemeanor:

104.11.2 Obstructing operations

104.11.3 Systems and Devices

107.5 Overcrowding

109.3.2 Compliance with Orders and Notices

111.4 Failure to comply

305.4 Deliberate or negligent burning

308.1.2 Throwing or placing sources of ignition

310.7 Burning Objects

3104.7 Open or exposed flames

#### Chapter 2 Definitions is adopted in its entirety with the following amendments:

**Sections 202 General Definitions** is hereby revised by adding "Alterations", "Floor Area", "Flow-line", "Hazardous Fire Area", and "Sky Lantern" as follows:

#### 202 General Definitions

ALTERATION. Any construction or renovation to an existing structure other than a repair or addition. Alterations include but are not limited to the addition or elimination of walls within the existing building envelope. Alteration also includes modifications to the structure which involve 50% or more removal and replacement of wall board within any room.

**FLOOR AREA.** For the purpose of calculating square footage for application of fire sprinkler requirements, the floor area shall be determined in accordance with the CBC definition for "Floor Area, Gross". For Group R-3 occupancies portions of the structure not required to be protected by the automatic sprinkler system do not need to be included into the floor area calculation.

**FLOW-LINE.** is the lowest continuous elevation on a rolled curb defined by the path traced by a particle in a moving body of water at the bottom of the rolled curb.

HAZARDOUS FIRE AREA. Includes all areas identified within Section 4906.2 and other areas as determined by the Fire Code Official due to the presence of combustible vegetation, or the proximity of the property to an area that contains combustible vegetation.

SKY LANTERN. An airborne lantern typically made of paper, Mylar, or other lightweight material with a wood, plastic, or metal frame containing a candle, fuel

cell, or other heat source that provides buoyancy.

Chapter 3 General Precautions Against Fire is adopted in its entirety with the following amendments:

Section 304.1.2 Vegetation is hereby revised as follows:

**304.1.2 Vegetation.** Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirement in urban-wildland interface areas shall be in accordance with Chapter 49 and OCFA vegetation management guidelines.

Section 305.5 Chimney spark arresters is hereby added as follows:

**305.5 Chimney spark arresters.** All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrester. Chimneys serving outdoor appliances or fireplaces shall be equipped with a spark arrester. The spark arrester shall meet the requirements of Section 2113.9.2 of the California Building Code.

Section 305.6 Outdoor fires is hereby added as follows:

**305.6 Outdoor fires.** Outdoor fires shall be in accordance with Sections 305, 307, and 308 and with other applicable sections of this code.

**305.6.1 Where prohibited.** Outdoor fires shall not be built, ignited or maintained in fuel modification areas, Wildfire Risk Areas (WRA) and adopted Fire Hazard Severity Zones (FHSZ) or Special Fire Protection Areas (SFPA) or other locations where conditions could cause the spread of fire to the WRA, SFPA or FHSZ, except by permit from the fire code official.

**Exceptions:** A permit is not required for the following:

- 1. Fires in approved outdoor or portable fireplaces, fire pits, fire rings and similar devices at Group R occupancies that are installed and used in accordance with this code.
- 2. Outdoor fires at inhabited premises or official organized campsites or parks when located in a permanent or portable barbeque or grill, incinerator, or outdoor fireplace located at least 30 feet from combustible vegetation.
- 3. Installations or uses approved by the fire code official.

305.6.1.1 Fuel Modification Areas. Outdoor fires using wood or other solid fuel shall not be built, ignited or maintained in a fuel modification area.

**305.6.1.2 Supervision.** Where a permit is issued or when allowed under the exceptions to Section 305.6.1, such fires shall be supervised by a person 18 years of age or older.

305.6.2 Hazardous conditions. Outdoor fires are not allowed when predicted sustained winds exceed 8 MPH during periods when relative humidity is less than 25%, or a red flag condition has been declared or public announcement is made, when an official sign was caused to be posted by the fire code official, or when such fires present a hazard as determined by the fire code official.

**305.6.3 Disposal of rubbish.** Rubbish, trash or combustible waste material shall be burned only within an approved incinerator and in accordance with Section 307.2.1.

Section 307 OPEN BURNING, RECREATIONAL FIRES AND PORTABLE OUTDOOR FIREPLACES is hereby amended as follows:

SECTION 307 OPEN BURNING, RECREATIONAL FIRES, FIRE PITS, FIRE RINGS, AND OUTDOOR FIREPLACES

**307.6 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices used at Group R Occupancies.** Outdoor fireplaces, fire pits, fire rings, or similar exterior devices used at Group R shall comply with this section.

Exception: Barbeques, grills, and other portable devices intended for cooking.

**307.6.1 Gas-fueled devices.** Outdoor fireplaces, fire pits and similar devices fueled by natural gas or liquefied-petroleum gas are allowed when approved by the Building Department and the device is designed to only burn a gas flame and not wood or other solid fuel. At R-3 occupancies, combustible construction shall not be located within three feet of an atmospheric column that extends vertically from the perimeter of the device. At other R occupancies, the minimum distance shall be ten feet. Where a permanent Building Department approved hood and vent is installed, combustible construction may encroach upon this column between the bottom of the hood and the vent opening. Where chimneys or vents are installed, they shall have a spark arrester in accordance with Section 305.5.

307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas. Fireplaces burning wood or other solid fuel shall be constructed in accordance with the California Building Code and Section 305.5. Fires in a fireplace shall be contained within a firebox with an attached chimney. The opening in the face of the firebox shall have an installed and maintained method of arresting sparks. The burning of wood or other solid fuel in a device is not allowed within 15 feet of combustible structures, unless within a permanent or portable fireplace. Conditions

which could cause a fire to spread within 25 feet of a structure or to vegetation shall be eliminated prior to ignition. Fires in devices burning wood or solid fuel shall be managed per Section 307.5.

307.6.2.1 Where prohibited. The burning of wood and other solid fuels shall not be conducted within a fuel modification zone. Wood and other solid fuel burning fires in devices other than permanent fireplaces are not allowed within Wildfire Risk Areas (WRA) and adopted Fire Hazard Severity Zones (FHSZ) and Special Fire Protection Areas (SFPA) or in locations where conditions could cause the spread of fire to the WRA or FHSZ, unless determined by the Fire Code Official that the location or design of the device should reasonably prevent the start of a wildfire.

Section 319 Development on or Near Land Containing or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors, is hereby added as follows:

319 Development On Or Near Land Containing Or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors. The fire code official may require the submittal for approval of geological studies, evaluations, reports, remedial recommendations and/or similar documentation from a state-licensed and department-approved individual or firm, on any parcel of land to be developed which has, or is adjacent to, or within 1,000 feet (304.8 m) of a parcel of land that has an active, inactive, or abandoned oil or gas well operation, petroleum or chemical refining facility, petroleum or chemical storage, or may contain or give off toxic, combustible or flammable liquids, gases or vapors.

Section 320 Fuel Modification Requirements for New Construction is hereby added as follows:

**320 Fuel Modification Requirements for New Construction**. All new buildings to be built or installed in areas with or adjacent to land having hazardous combustible vegetation shall comply with the requirements in the edition of OCFA Vegetation Management Guidelines currently in use at the time of plan submittal.

Section 321 Clearance of brush or vegetation growth from roadways is hereby added as follows:

**321 Clearance of brush or vegetation growth from roadways**. The fire code official is authorized to cause areas within 10 feet (3048 mm) on each side of portions of highways and private streets which are improved, designed or ordinarily used for vehicular traffic, to be cleared of flammable vegetation and other combustible growth. Measurement shall be from the flow-line or the end of the improved edge of the roadway surfaces.

**Exception:** Single specimens of trees, ornamental shrubbery or cultivated ground cover such as green grass, ivy, succulents or similar plants used as ground covers, provided that they do not form a means of readily transmitting fire.

#### Section 322 Unusual Circumstances is hereby added as follows:

**322 Unusual circumstances.** The fire code official may suspend enforcement of the vegetation management requirements and require reasonable alternative measures designed to advance the purpose of this code if determined that in any specific case that any of the following conditions exist:

- 1. Difficult terrain.
- 2. Danger of erosion.
- 3. Presence of plants included in any state and federal resources agencies, California Native Plant Society and county-approved list of wildlife, plants, rare, endangered and/or threatened species.
- 4. Stands or groves of trees or heritage trees.
- 5. Other unusual circumstances that make strict compliance with the clearance of vegetation provisions undesirable or impractical.

#### Section 323 Use of Equipment is hereby added as follows:

**323 Use of equipment.** Except as otherwise provided in this section, no person shall use, operate, or cause to be operated in, upon or adjoining any hazardous fire area any internal combustion engine which uses hydrocarbon fuels, unless the engine is equipped with a spark arrester as defined in Section 323.1 maintained in effective working order; or the engine is constructed, equipped and maintained for the prevention of fire.

#### Exceptions:

- 1. Engines used to provide motor power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code of the State of California.
- Turbocharged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel, there is no exhaust bypass to the atmosphere, and the turbocharger is in good mechanical condition

## Section 323.1 Spark Arresters is hereby added as follows:

#### **323.1 Spark arresters.** Spark arresters shall comply with the following:

1. A spark arrester is a device constructed of nonflammable material specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inch (0.58 mm) in size from the exhaust flow of an internal combustion engine that uses hydrocarbon fuels or which is qualified and rated by the United States Forest Service.

2. Spark arresters affixed to the exhaust system of engines or vehicles subject to Section 322 shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.

## Section 324 Restricted Entry is hereby added as follows:

**324 Restricted entry.** The fire code official shall determine and publicly announce when hazardous fire areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of hazardous fire areas, except public roadways, inhabited areas or established trails and camp sites which have not been closed during such time when the hazardous fire area is closed to entry, is prohibited.

#### Exceptions:

- 1. Residents and owners of private property within hazardous fire areas and their invitees and guests going to or being upon their lands.
- 2. Entry, in the course of duty, by peace or police officers, and other duly authorized public officers, members of a fire department and members of the United States Forest Service.

## Section 325 Trespassing on posted property is hereby added as follows:

**325 Trespassing on posted property.** When the fire code official determines that a specific area within a hazardous fire area presents an exceptional and continuing fire danger because of the density of natural growth, difficulty of terrain, proximity to structures or accessibility to the public, such areas shall be closed until changed conditions warrant termination of closure. Such areas shall be posted as hereinafter provided.

- 1. Signs. Approved signs prohibiting entry by unauthorized persons and referring to applicable fire code chapters shall be placed on every closed area.
- 2. Trespassing. Entering and remaining within areas closed and posted is prohibited.

**Exception:** Owners and occupiers of private or public property within closed and posted areas, their guests or invitees, and local, state and federal public officers and their authorized agents acting in the course of duty.

## Section 326 Sky Lanterns or similar devices is hereby added as follows:

**326 Sky Lanterns or similar devices.** The ignition and/or launching of a Sky Lantern or similar device is prohibited.

**Exception**: Upon approval of the fire code official, sky lanterns may be used as necessary for religious or cultural ceremonies providing that adequate

safeguards have been taken as approved by the fire code official. Sky Lanterns must be tethered in a safe manner to prevent them from leaving the area and must be constantly attended until extinguished.

## Chapter 4: Emergency Planning and Preparedness is adopted only the Sections listed below:

- 1. 401
- 2. 401.3.4
- 3. 401.9
- 4. 402
- 5. 403
- 6. 404.6 404.7.6
- 7. 407
- 8. 408.3.1 408.3.2
- 9. 408.12 408.12.3

Chapter 5 Fire Service Features is adopted in its entirety with the following amendments

#### SECTION 503.2.1 Dimensions is revised as follows:

**503.2.1 Dimensions.** Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm). Street widths are to be measured from top face of curb to top face of curb, on streets with curb and gutter, and from flow-line to flow-line on streets with rolled curbs.

#### SECTION 503.2.1.1 Hazardous Fire Area is added as follows:

**503.2.1.1 Hazardous Fire Areas.** In Hazardous Fire Areas the minimum fire apparatus road width shall be 28 feet (8530 mm). The width shall be maintained to an approved point outside of the Hazardous Fire Area.

**Exception:** When the road serves no more than three dwelling units and the road does not exceed 150 feet in length, the road width may be 24 feet (7300 mm). This length may be increased to 400 feet where serving no more than three dwelling units and all structures accessed from the roadway are protected by automatic fire sprinklers.

#### Section 505.1 Address identification is revised as follows:

**505.1** Address identification. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Where required by the fire code official, address numbers shall be provided in additional approved

locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm) for R-3 occupancies, for all other occupancies the numbers shall be a minimum of 6 inches high with a minimum stroke width of 1 inch. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

## Section 510.1 Emergency responder radio coverage is revised as follows:

- **510.1** Emergency responder radio coverage in new buildings. All new buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication systems. The Emergency responder radio coverage system shall comply with one of the following:
  - 1. An emergency radio system installed in accordance with the local authority having jurisdiction's ordinance.
  - 2. An emergency radio coverage system installed in accordance with Orange County Fire Authority's Emergency Responder Digital Radio Guideline.

#### Exceptions:

- 1. Where it is determined by the fire code official that the radio coverage system is not needed.
- In facilities where emergency responder radio coverage is required and such systems, components or equipment could have a negative impact on normal operations of the facility, the fire code official shall have the authority to accept an automatically activated emergency responder radio coverage system.

Sections 510.2; 510.3; 510.4; 510.5; 510.6 are hereby deleted without replacement:

Chapter 6 Building Service and Systems is adopted in its entirety with the following amendments

Section 608.1 Scope is hereby amended as follows:

**608.1 Scope**. Stationary storage battery systems having an electrolyte capacity of more than 50 gallons (189 L) for flooded lead acid, nickel cadmium (Ni-Cd) and valve-regulated lead acid (VRLA), or 1,000 pounds (454 kg) for lithium-ion and lithium metal polymer, used for facility standby power, emergency power or uninterruptible power supplies shall comply with this section and Table 608.1.

Indoor charging systems for electric carts/cars with more than 50 gallons (189 L) aggregate quantity shall comply with Section 608.10.

Section 608.10 Indoor charging of electric carts/cars is hereby added as follows:

**608.10 Indoor charging of electric carts/cars.** Indoor charging of electric carts/cars where the combined volume of all battery electrolyte exceeds 50 gallons shall comply with following:

- 1. Spill control and neutralization shall be provided and comply with Section 608.5.
- 2. Room ventilation shall be provided and comply with Section 608.6.1
- 3. Signage shall be provided and comply with Section 608.7.1
- 4. Smoke detection shall be provided and comply with Section 907.2

Chapter 7 Fire-Resistance-Rated Construction is adopted in its entirety without amendments.

Chapter 8 Interior Finish, Decorative Materials and Furnishings is adopted in its entirety without amendments.

Adopt Chapter 9 Fire Protection Systems is adopted in its entirety with the following amendments:

Section 903.2 Where required is hereby revised as follows:

903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in this section and in Section 903.2 of the California Fire Code as amended by the City of San Juan Capistrano as follows:

New buildings: In addition to the requirements of section 903.2.1 through 903.2.19, approved automatic sprinkler systems in new buildings and structures shall be provided as follows (Exception: Group R Detached one- two-family dwellings and townhouses as required by section 903.2.8):

- iv. Throughout all Groups A, I, E, and H
  Occupancies
- v. Throughout all Group B, F, M, and S Occupancies exceeding 1,000 square feet
- vi. Throughout all Group U-1 Occupancies exceeding 6,000 square feet

For the purposes of this section, fire walls shall not define separate buildings.

Alteration: When the floor area of the Alteration within any two-year period exceeds 75% of area of the existing structure and the alteration includes structural modifications other than seismic upgrade.

Addition: Sprinkler protection shall be provided throughout the entire building when:

- d) Existing non sprinkled building less than 5,000 ft<sup>2</sup>: where 20% or more is added and the gross floor area exceeds 5,000 square feet.
- e) Existing non sprinkled building equal or greater than 5,000 ft<sup>2</sup>: where more than 1,000 ft<sup>2</sup> is added.
- f) Fire sprinklers shall be provided in additions to an existing building that has fire sprinklers installed.

Subsection 903.2.8 of Section 903 of CBC is hereby amended to read in its entirety as follows:

903.2.8 Group R. An automatic sprinkler system installed in accordance with Subsection 903.3 of Section 903 of this code and Subsection 903.2.8 of Section 903 of the California Fire Code as amended by the City of San Juan Capistrano shall be provided throughout all buildings with a Group R fire area as follows:

**New buildings:** An automatic sprinkler system shall be installed throughout all new buildings.

**Existing buildings:** An automatic sprinkler system shall be installed throughout when one of the following conditions exists:

c. When an addition is 33% or more of the existing building area, as defined in Section 502.1, and greater than 1000 square feet (92.903 m²) within a two year period; or

**Exception:** When demonstrated to the fire code official that the hydraulic demand of the fire sprinkler system requires a water meter upgrade solely for the fire sprinkler system, and that upgrade requires replacement of the domestic lateral feed from the water main to the water meter solely for the fire sprinkler system, fire sprinklers shall not be required.

d. An addition when the existing building is already provided with automatic sprinklers; or.

When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

#### Exceptions:

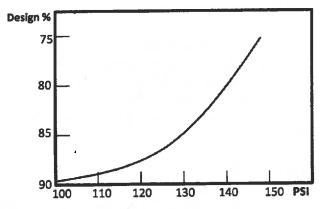
- 1. Existing Group R-3 occupancies converted to Group R-3.1 occupancies not housing bedridden clients, not housing non ambulatory clients above the first floor and not housing clients above the second floor.
- 2. Existing Group R-3 occupancies converted to Group R-3.1 occupancies housing only one bedridden client and complying with Section 425.8.3.3.
- 3. Pursuant to Health and Safety Code Section 13113 occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.
- 4. Pursuant to Health and Safety Code Section 13143.6 occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).

Section 903.3.5.3 Hydraulically calculated systems is hereby added as follows:

**903.3.5.3** Hydraulically calculated systems. The design of hydraulically calculated fire sprinkler systems shall not exceed 90% of the water supply capacity

**Exception:** When static pressure exceeds 100 psi, and required by the Fire Code Official, the fire sprinkler system shall not exceed water supply capacity specified by Table 903.3.5.3

TABLE 903.3.5.3
Hydraulically Calculated Systems



Section 903.4 Sprinkler system supervision and alarms is hereby revised by modifying item 1, deleting item 3 and 5, and renumbering the Exceptions as follows:

1. Automatic sprinkler systems protecting one- and two-family dwellings.

2. Limited area systems serving fewer than 20 sprinklers.

- 3. Jockey pump control valves that are sealed or locked in the open position.
- 4. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
- 5. Trim valves to pressure switches in dry, pre-action and deluge sprinkler systems that are sealed or locked in the open position.

Section 905.4 Location of Class I standpipe hose connections is hereby amended by adding item 7 as follows:

- 6. The centerline of the 2.5 inches (63.5 mm) outlet shall be no less than 18 inches (457.2 mm) above and no more than 24 inches above the finished floor.
- 7. Section 907.3.1 Duct smoke detectors is hereby amended as follows:

907.3.1 Duct smoke detectors. Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is installed. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a constantly attended location and shall perform the intended fire safety function in accordance with this code and the California Mechanical Code. Duct smoke detectors shall not be used as a substitute for required open area detection.

Exception:

In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as

air duct detector trouble.

#### Section 907.6.5 Monitoring is revised as follows

**907.6.5 Monitoring.** Fire alarm systems required by this chapter or by the California Building Code shall be monitored by an approved supervising station in accordance with NFPA 72, this section, and per Orange County Fire Authority Guideline "New and Existing Fire Alarm & Signaling Systems".

Chapter 10 Means of Egress is adopted in its entirety without amendments

Chapter 11 Construction Requirements for Existing Buildings. Adopt only those Sections and Subsections listed below:

1103.7 1103.7.3 1103.7.3.1 1103.7.8 — 1103.7.8.2 1103.7.9 — 1103.7.9.10 1103.8 — 1103.8.5.3

Chapter 20 Aviation Facilities is adopted in its entirety without amendments.

Chapter 21 Dry Cleaning is adopted in its entirety without amendments.

Chapter 22 Combustible Dust-Producing Operations is adopted in its entirety without amendments.

Chapter 23 Motor Fuel-Dispensing Facilities and Repair Garages is adopted in its entirety without amendments.

Chapter 24 Flammable Finishes is adopted in its entirety without amendments.

Chapter 25 Fruit and Crop Ripening is adopted in its entirety without amendments.

Chapter 26 Fumigation and Thermal Insecticidal Fogging is adopted in its entirety without amendments.

Chapter 27 Semiconductor Fabrication Facilities is adopted in its entirety without amendments

Chapter 28 Lumber Yards and Woodworking Facilities is adopted in its entirety with the following amendments:

Section 2801.2 Permit is hereby revised by adding the following statement to the last sentence:

2801.2 Permit. Permits shall be required as set forth in Section 105.6. For Miscellaneous Combustible Storage Permit, see Section 105.6.29.

Section 2808.2 Storage site is hereby revised as follows:

**2808.2 Storage site**. Storage sites shall be level and on solid ground or other all-weather surface. Sites shall be thoroughly cleaned and approval from the fire code official obtained before transferring products to the site.

Section 2808.3 Size of piles is hereby revised as follows:

2808.3 Size of piles. Piles shall not exceed 15 feet (4572 mm) in height, 50 feet (15 240 mm) in width and 100 feet (30 480 mm) in length.

Section 2808.7 Pile fire protection is hereby revised by adding the following statement to the last sentence:

2808.7 Pile fire protection. Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible conveyor systems and enclosed conveyor systems shall be equipped with an approved automatic sprinkler system. Oscillating sprinklers with a sufficient projectile reach are required to maintain a 40% to 60% moisture content and wet down burning/smoldering areas.

Section 2808.9 Material-handling equipment, is hereby revised by adding the following sentence at the beginning of the section:

2808.9 Material-handling equipment. All material handling equipment operated by an internal combustion engine shall be provided and maintained with an approved spark arrester. Approved material-handling equipment shall be available for moving wood chips, hogged material, wood fines and raw product during fire-fighting operations.

Section 2808.11 Temperature control, is hereby added as follows:

**2808.11 Temperature control.** The temperature shall be monitored and maintained as specified in Sections 2808.11.1 and 2808.11.2.

Section 2808.11.1 Pile temperature control, is hereby added as follows:

**2808.11.1** Pile temperature control. Piles shall be rotated when the internal temperature readings are in excess of 165 degrees Fahrenheit.

Section 2808.11.2 New material temperature control, is hereby added as follows:

2808.11.2 New material temperature control. New loads delivered to the facility shall be inspected and tested at the facility entry prior to taking delivery. Material with temperature exceeding 165 degrees Fahrenheit shall not be accepted on the site. New loads shall be monitored to verify that the temperature

remains stable.

Chapter 29 Manufacture of Organic Coatings is adopted in its entirety without amendments.

Chapter 30 Industrial Ovens is adopted in its entirety without amendments.

Chapter 31 Tents and Other Membrane Structures is adopted in its entirety without amendments.

Chapter 32 High-Piled Combustible Storage is adopted in its entirety without amendments.

Chapter 33 Fire Safety During Construction and Demolition is adopted in its entirety without amendments.

Chapter 34 Tire Rebuilding and Tire Storage is adopted in its entirety without amendments.

Chapter 35 Welding and Other Hot Work is adopted in its entirety without amendments.

Chapter 36 Marinas is adopted in its entirety without amendments.

Chapter 48 Motion Picture and Television Production Studio Sound Stages, Approved Production Facilities and Production Locations is adopted in its entirety without amendments.

Chapter 49 Requirements for Wildland-Urban Interface Fire Areas is adopted in its entirety with the following amendments:

**Section 4906.3 Vegetation** is hereby revised by adding Section "(5)" as follows:

(5) OCFA Vegetation Management Guidelines.

Section 4908 Fuel Modification Requirements for New Construction is hereby added as follows:

**4908 Fuel Modification Requirements for New Construction.** All new buildings to be built or installed in hazardous fire areas shall comply with the following:

- 1. Preliminary fuel modification plans shall be submitted to and approved by the fire code official concurrent with the submittal for approval of any tentative map.
- 2. Final fuel modification plans shall be submitted to and approved by the fire code official prior to the issuance of a grading permit.
  - 2.1 The fuel modification plan shall include provisions for the maintenance of the fuel modification for perpetuity.

3. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of the Orange County Fire Authority Vegetation Management Guidelines.

4. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification areas shall have prior approval from the fire code

official.

5. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in the Fire Code.

Chapter 50 Hazardous Materials – General Provisions is adopted in its entirely with the following amendments.

Section 5001.5.2 Hazardous Materials Inventory Statement (HMIS), is hereby amended by modifying the starting paragraph as follows:

5001.5.2 Hazardous Materials Inventory Statement (HMIS). Where required by the fire code official, an application for a permit shall include Orange County Fire Authority's Chemical Classification Packet, which shall be completed and approved prior to approval of plans, and/or the storage, use or handling of chemicals on the premises. The Chemical Classification Packet shall include the following information:

- 1. Product Name
- 2. Component
- 3. Chemical Abstract Service (CAS) number
- 4. Location where stored or used.
- 5. Container size
- 6. Hazard classification
- 7. Amount in storage
- 8. Amount in use-closed systems
- 9. Amount in use-open systems.

Table 5003.1.1(1) Maximum Allowable Quantity per Control Area of Hazardous Materials Posing a Physical Hazard is hereby amended by deleting Footnote K without replacement as follows:

Section 5003.1.1.1 Extremely Hazardous Substances is hereby added as follows:

**5003.1.1.1 Extremely Hazardous Substances.** No person shall use or store any amount of extremely hazardous substances (EHS) in excess of the disclosable amounts (see Health and Safety Code Section 25500 et al) in a residential zoned or any residentially developed property.

**Section 5003.5 Hazard identification signs** is hereby amended by modifying the NFPA standard as follows:

5003.5 Hazard identification signs. Unless otherwise exempted by the fire code official, visible hazard identification signs as specified in the Orange County

Fire Authority Signage Guidelines for the specific material contained shall be placed on stationary containers and above-ground tanks and at entrances to locations where hazardous materials are stored, dispensed, used or handled in quantities requiring a permit and at specific entrances and locations designated by the fire code official.

Chapter 51 Aerosols is adopted in its entirety without amendments.

Chapter 52 Combustible Fibers is adopted in its entirety without amendments.

Chapter 53 Compressed Gases is adopted in its entirety without amendments.

Chapter 54 Corrosive materials is adopted in its entirety without amendments.

Chapter 55 Cryogenic Fluids is adopted in its entirety with the following amendment.

Section 5503.4.1 Identification signs is hereby revised as follows:

5503.4.1 Identification signs. Visible hazard identification signs in accordance with the Orange County Fire Authority Signage Guidelines shall be provided at entrances to buildings or areas in which cryogenic fluids are stored, handled or used.

Chapter 56 Explosives and Fireworks California Fire Code Chapter 56 is adopted in its entirety with the following amendments:

Section 5601.2 Retail Fireworks is hereby added as follows:

**5601.2 Retail Fireworks**. The storage, use, sale, possession, and handling of fireworks 1.4G (commonly referred to as Safe & Sane) and fireworks 1.3G is prohibited.

**Exception:** Fireworks 1.4G and fireworks 1.3G may be part of an electrically fired public display when permitted and conducted by a licensed pyrotechnic operator

Section 5601.3 Selzure of Fireworks is hereby added as follows:

5601.3 Seizure of Fireworks. The fire code official shall have the authority to seize, take, remove all fireworks stored, sold, offered for sale, used or handled in violation of the provisions of Title 19 CCR, Chapter 6. Any seizure or removal pursuant to this section shall be in compliance with all applicable statutory, constitutional, and decisional law.

Section 5602 Explosives and blasting is hereby added as follows:

5602 Explosives and blasting. Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed of

within wildland-urban interface areas, or hazardous fire areas except by permit from the fire code official.

Section 5608.1 General is hereby revised as follows:

**5608.1 General**. Outdoor fireworks displays, use of pyrotechnics before a proximate audience and pyrotechnic special effects in theatrical and group entertainment productions shall comply with California Code of Regulations, Title 19, Division 1, Chapter 6 Fireworks, the Orange County Fire Authority Guidelines for Public Fireworks Displays, and with the conditions of the permit as approved by the fire code official.

Section 5608.2 Firing is hereby added as follows:

**5608.2 Firing**. All fireworks displays shall be electrically fired.

Chapter 57 Flammable and Combustible Liquids is adopted in its entirety with the following amendment.

Section 5704.2.3.2 Label or placard is hereby amended by modifying the NFPA standard as follows:

**5704.2.3.2 Label or placard.** Tanks more than 100 gallons (379 L) in capacity, which are permanently installed or mounted and used for the storage of Class I, II or III liquids, shall bear a label and placard identifying the material therein. Placards shall be in accordance with the Orange County Fire Authority Signage Guidelines.

Chapter 58 Flammable Gases and Flammable Cryogenic Fluids is adopted in its entirety without amendments.

Chapter 59 Flammable Solids is adopted in its entirety without amendments.

Chapter 60 Highly Toxic and Toxic Materials is adopted in its entirety with the following amendments.

**Section 6004.2.2.7 Treatment system** is hereby amended by modifying the exceptions as follows:

#### **Exception:**

- 1. Toxic gases storage/use. Treatment systems are not required for toxic gases supplied by cylinders or portable tanks not exceeding 1,700 pounds (772 kg) water capacity when the following are provided:
- 1.1 A listed or approved gas detection system with a sensing interval not exceeding 5 minutes.
- 1.2. For storage, valve outlets are equipped with gas-tight outlet plugs or

caps.

1.3 For use, a listed and approved automatic-closing fail-safe valve located immediately adjacent to cylinder valves. The fail-safe valve shall close when gas is detected at the permissible exposure limit (PEL) by a gas detection system monitoring the exhaust system at the point of discharge from the gas cabinet, exhausted enclosure, ventilated enclosure or gas room. The gas detection system shall comply with Section 6004.2.2.10.

Chapter 61 Liquefied Petroleum Gases is adopted in its entirety without amendments.

Chapter 62 Organic Peroxides is adopted in its entirety without amendments.

Chapter 63 Oxidizers, Oxidizing Gases, and Oxiding Cryogenic Fluids is adopted in its entirety without amendments.

Chapter 64 Pyrophoric Materials is adopted in its entirety without amendments.

Chapter 65 Pyroxylin (Cellulose Nitrate) Plastics is adopted in its entirety without amendments.

Chapter 66 Unstable (Reactive) Materials is adopted in its entirety without amendments.

Chapter 67 Water-Reactive Solids and Liquids is adopted in its entirety without amendments.

Chapter 80 Referenced Standards is adopted in its entirety with the following amendments:

NFPA 13, 2013 Edition, Installation of Sprinkler Systems is hereby amended as follows:

#### Section 6.8.3 is hereby revised as follows:

**6.8.3** Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½" inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the fire code official. The size of piping and the number of inlets shall be approved by the fire code official. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 gpm (including inside hose stream demand) or greater, or a standpipe system is included, four 2 ½" inlets shall be provided.

# Section 8.3.3.1 is hereby revised as follows:

**8.3.3.1.** When fire sprinkler systems are installed in shell buildings of undetermined use (Spec Buildings) other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the fire sprinkler plan is submitted. Sprinklers in light hazard occupancies shall be one of the following:

(5) Quick-response type as defined in 3.6.4.7

- (6) Residential sprinklers in accordance with the requirements of 8.4.5
- (7) Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers

(8) Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems

# Section 8.17.1.1.1 is hereby added as follows

8.17.1.1.1 Residential Waterflow Alarms. A local water-flow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system, where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be minimum of 15 DBA above the average ambient sound or a minimum of 75 DBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

# Section 11.1.1.2 is hereby added as follows:

11.1.2 When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction(s) in density or design area. Warehouse fire sprinkler systems shall be designed to Figure 16.2.1.3.2 (d) curve "G". Use is considered undetermined if a specific tenant/occupant is not identified at the time the sprinkler plan is submitted. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.

# **Section 11.2.3.1.1.1** is hereby added as follows:

- 11.2.3.1.1.1 The available water supply for fire sprinkler system design shall be determined by one of the following methods, as approved by the Fire Code Official:
  - 1) Subtract the project site elevation from the low water level for the appropriate pressure zone and multiply the result by 0.433;

2) Use a maximum of 40 psi, if available;

3) Utilize the Orange County Fire Authority water-flow test form/directions to document a flow test conducted by the local water agency or an approved third party licensed in the State of California.

### Section 23.2.1.1 is hereby revised as follows:

**Section 23.2.1.1** Where a waterflow test is used for the purposes of system design, the test shall be conducted no more than 6 months prior to working plan submittal unless otherwise approved by the authority having jurisdiction.

NFPA 13R 2013 Edition, Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby amended as follows:

#### Section 6.16.1 is hereby revised as follows:

**6.16.1** A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2010 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

NFPA 13D 2013 Edition, Standard for the Installation of Sprinkler Systems in Oneand Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

Section 4.1.3 is hereby added as follows:

## 4.1.3 Stock of Spare Sprinklers

# **Section 4.1.3.1** is hereby added as follows:

**4.1.3.1**. A supply of at least two sprinklers for each type shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

# Section 4.1.3.2 is hereby added as follows:

**4.1.3.2** The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

### Section 4.1.3.3 is hereby added as follows:

**4.1.3.3** The sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100 °F (38°C).

## Section 4.1.3.4 is hereby added as follows:

**4.1.3.4** A special sprinkler wrench shall be provided and kept in the cabinet to be used in the removal and installation of sprinklers. One sprinkler wrench shall be provided for each type of sprinkler installed.

## Section 7.1.2 is hereby revised as follows:

**7.1.2** The system piping shall not have a separate control valve unless supervised by a central station, or remote station alarm service

# Section 7.6 is hereby deleted in its entirety and replaced as follows:

**7.6 Alarms.** Exterior alarm indicating device shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location is subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

## Exception:

- 1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
- 2. When smoke detectors specified under CBC Section 907.2.11 are used to sound an alarm upon waterflow switch activation.

National Fire Protection Association (NFPA) 14, 2013 Edition, Installation of Standpipe and Hose Systems is hereby amended as follows:

# Section 7.3.1.1 is hereby is deleted in its entirety and replaced as follows:

**7.3.1.1 Hose Connection Height** Class I and III Standpipe hose connections shall be unobstructed and shall be located not less than 18 inches, or more than 24 inches above the finished floor. Class II Standpipe hose connections shall be unobstructed and shall be located not less than 3 feet or more than 5 feet above the finished floor.

National Fire Protection Association (NFPA) 24, 2013 Edition, Installation of

## Private Fire Service Mains and Their Appurtenances is hereby amended as follows:

### Section 6.2.1.1 is hereby added as follows:

**6.2.1.1** The closest upstream indicating valve to the riser shall be painted OSHA red.

## Section 6.2.11 (5) is hereby deleted without replacement and (6) and (7) renumbered:

- (5) Control Valves installed in a fire-rated room accessible from the exterior.
- (6) Control valves in a fire-rated stair enclosure accessible from the exterior as permitted by the authority having jurisdiction.

#### Section 6.3.3 is hereby added as follows:

Section 6.3.3 All post indicator valves controlling fire suppression water supplies shall be painted OSHA red.

### Section 10.1.6.3 is hereby added as follows:

10.1.6.3 All ferrous pipes shall be coated and wrapped. Joints shall be coated and wrapped after assembly. All fittings shall be protected with an 8-mil polyethylene tube. The ends of the tube shall extend past the joint by a minimum of 12 inches and be sealed with 2 inch wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

Exception: 304 or 316 Stainless Steel pipe and fittings

#### Section 10.3.6.2 is hereby revised as follows:

**10.3.6.2** All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material, prior to poly-tube, and after installation.

**Exception:** Bolted joint accessories made from 304 or 316 stainless steel.

#### Section 10.3.6.3 is hereby added as follows:

10.3.6.3 All bolts used in pipe-joint assembly shall be 316 stainless steel.

#### Section 10.6.3.1 is hereby revised as follows:

10.6.3.1 Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 18 inches, as measured from the interior of the exterior wall. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or comply with 10.6.2.

## Section 10.6.4 is hereby revised as follows:

10.6.4 Pipe Joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints.

Appendix B is adopted in its entirety without amendments.

Appendix BB is adopted in its entirety without amendments:

**Appendix C** is adopted in its entirety without amendments:

**Appendix CC** is adopted in its entirety without amendments:

# Section 8. Adoption of the 2013 California Green Building Standards Code.

Section 8-16.01 of Chapter 16, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2010 California Green Building Standards Code" is hereby amended to read as follows:

#### Section 8-16.01 Adoption of the 2013 California Green Building Standards Code.

The 2013 California Green Building Standards Code is hereby adopted by reference and made part of this code subject to the following amendments:

- a) Section 202 Definitions is amended to add the following: Sustainability. Consideration of present development and construction impacts on the community, the economy, and the environment without compromising the needs of the future.
- b) Section 4.304.1 Irrigation controllers is amended to read as follows:
  Irrigation controllers. Automatic irrigation system controllers for landscaping provided and installed at the time of final inspection and shall comply with the following:

1. Controllers shall be weather- or soil moisture-based irrigation controllers that automatically adjust irrigation in response to changes in plants' needs as

weather conditions change.

 Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects of communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

### Section 9. Adoption of the 2013 California Residential Code.

Section 8-17.01 of Chapter 17, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2010 California Residential Code" is hereby amended to read as follows:

## Section 8-17.01 Adoption of the 2013 California Residential Code.

The 2013 California Residential Code, based on the 2012 International Residential Code as published by the International Code Council (ICC), is hereby adopted by reference and made part of this code subject to the following amendments:

#### Section R100 "Division II Administration" is hereby amended to read as follows:

1. Subsection R101.1 "Title" is hereby amended to read as follows:

"These provisions shall be known as the California Residential Code of the

City of San Juan Capistrano, and shall be cited as such and will be referred to herein as "this code.""

2. Subsection R101.2 "Scope" is hereby amended to read as follows:

"The provisions of the California Residential Code" shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one and two story dwellings and townhouses not more than three stories above grade plane in height with separate means of egress and their accessory structures.

Exception: Live/work units complying with the requirements of Section 419 of the California Building Code shall be permitted to be built as one and two story dwellings or townhouses. Fire suppression required by Section 419.5 of the California Building Code when constructed under the California Residential Code shall conform to Section 903.3.1.3 of the California Building Code.

The provisions of these codes shall apply to and affect all of the territory of the City of San Juan Capistrano, except work located primarily in a public way; public utility towers and poles; mechanical equipment not specifically regulated in these codes; hydraulic flood control structures; facilities for the production, generation, storage or transmission of water or electrical energy by a local agency; and except as exempted by these codes."

3. Subsection R105.2 "Work exempt from permit" is hereby amended to read as follows:

# Building:

 One-story detached accessory buildings used as tool and storage sheds, playhouses and similar uses and structures such as portable shade cloth structures, provided the floor area does not exceed 120 square feet. Such structures must comply with the setback and height requirements of the City Zoning Ordinance and the Fire Code.

2. Masonry or concrete fences not over 36 inches in height measured from the top of footing to top of wall, and all other fences (wood, vinyl, wrought iron, etc.) not over 36 inches in height above the lowest adjacent grade and any fence located with the zoning from yard setback distance not over 36 inches high.

3. Sidewalks and driveways.

4. Retaining walls that are not over 48 inches in height measured from the bottom of footing to top of wall unless supporting a surcharge, impounding Class I, II or II-A liquids or at the top or bottom of slope.

5. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not

exceed 2:1.

6. Decks, platforms or similar structures not exceeding 200 square feet in area not more than 30 inches above adjacent grade at any point, and not attached to a dwelling and do not serve the exit door required by Section

R311.4.

- 7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work that does not involve electrical, mechanical or plumbing work.
- 8. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 18 inches deep, do not exceed 5,000 gallons and are installed entirely above ground.
- 9. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
- 10. Swings and other playground equipment accessory to detached oneand two-family dwellings.
- 11. Window awnings supported by an exterior wall that do not project more than 54 inches from the exterior wall and do not require additional support of Group R-3 and U occupancies.
- 12. Radio and television antenna, flagpoles not over twelve (12) feet in height measured from grade.

"Unless otherwise exempted, separate plumbing, electrical and mechanical permits will be required for the above-exempted items."

# 4. Subsection R105.3.2 "Time limitation of application" is hereby amended to read as follows:

"R105.3.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless a permit has been issued. The building official is authorized to grant, in writing, one extension of time, for a period not more than 180 days."

# 5. **Subsection R105.5 "Expiration"** is hereby amended to read in its entirety as follows:

"R105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work commenced. Before such work can be recommenced after a permit expires, a new permit shall first be obtained to do so, and a fee therefore shall be one half the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work, and provided further that such suspension or abandonment has not exceeded one year. In order to renew action on a permit after expiration, the permittee shall pay a new full permit fee.

The building official is authorized to grant, in writing, one extension of time, for a period not more than 180 days. Any permittee holding an unexpired permit may apply for an extension of the time within which work may commence under that permit when the permittee is unable to commence work within the time required. The extension shall be requested in writing prior to the permit expiring and show justifiable cause demonstrating that circumstances beyond the control of the permittee have prevented action from being taken. No permit shall be extended more than once."

- 6. **Subsection R106.1 "Submittal documents"** is hereby amended to add a second paragraph that reads:
- "Subsection R106.1. Submittal Documents.

Soil report, prepared by an Engineer licensed by the State to practice by such, shall be submitted at the time of permit application. Soil report is required for all new construction and additions. The Building Official may waive the requirement of soil report if it is found that the scope of work applied for is not necessary to have a soil report."

7. **Subsection R106.3 "Examination of documents"** is hereby amended to add a second paragraph that reads:

"Subsection R106.3. Examination of Documents.

When submittal documents are required by Section R106.1, a plan review fee shall be paid at the time of submitting the documents for plan review. Said plan review fees are separate fees from the permit fees specified in Section R108.2 and are in addition to the permit fees. Said plan review fee shall be as set forth in the City Council Fee Resolution."

8. Subsection R106.5 "Retention of construction documents," is hereby amended to add a second paragraph that reads:

"The approved plan, permit application and inspection card and other construction documents required by the Building Official shall be imaged after the final inspection and will be a permanent record in the City. The applicant shall pay the cost of imaging at the time of permit."

9. Subsection R108.2 "Schedule of permit fees" is hereby amended to add a sentence at the end of the paragraph that reads:

"The fee for each permit shall be as set forth in the City Council Fee Resolution unless otherwise specified by the code."

10. **Subsection R108.3 "Building Permit Valuations"** is hereby amended to add a second paragraph that reads:

"The Building Official shall make the determination of value or valuation under any provisions of this code. The valuation shall be determined by using rational methods established by the Building Official that reasonably establish the construction value or the contract price of the actual construction cost. The value to be used in computing the Building Permit and Building Plan Review fees shall be the total value of all construction work for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent equipment."

11. Subsection R108.6 "Work commencing before permit issuance" is hereby amended to add a second paragraph that reads:

"An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by law."

12. Subsection R108.5 "Refunds" is hereby amended to read in its entirety;

R108.5 Refunds.

The building official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

The building official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review has been paid is withdrawn or canceled before any plan reviewing is done.

The building official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of payment.

13. Section R108 "Fees" is hereby amended by adding a new Subsection R108.7 Fees/Deposits as follows:

R108.7 Fees/Deposit. The Building Official may require a deposit from the applicant for a certain project or work in order to secure the request for final inspection approvals from the applicant or the repairing of damaged City properties during the period of construction. The deposit money will be refunded to the applicant when the final inspections are approved or the damages are repaired to the satisfaction of the City. The deposit amount shall not be more than twice the permit fee.

Another new Subsection R109.5 Re-inspections is hereby added to Section R109 of Division II of CRC to read in its entirety as follows:

R109.5 Re-inspections. A re-inspection fee may be assessed for each inspection or re-inspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

This subsection is not to be interpreted as requiring re-inspection fees the first time a job is rejected for failure to comply with the requirements of this Code, but as controlling the practice of calling for inspections before the job is ready for such inspection or re-inspection.

Re-inspection fees may be assessed when the inspection record card is not posted or otherwise made available on the work site; the approved plans are not readily available to the inspector, for failure to provide access on the date for

which inspection is requested, or for deviating from plans requiring the approval of the Building Official.

To obtain a re-inspection, the applicant shall pay the re-inspection fee as established by the City Council Fee Resolution.

In instances where re-inspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

- 14. Subsection R112.1 "General" is hereby amended to read as follow:
- R112.1 General. Any person adversely affected by a decision, order, or determination by the Building Official under the California Building Code may appeal the matter to the City Building Standards Appeal Board pursuant to the appeal provisions as established by City Council resolution.
- 15. Subsection R110.1 "Use and occupancy" is hereby amended to read as follow:

"No construction or erection of a building or structure shall be used or occupied, and no change in the existing occupancy classification of any building or structure or portion thereof shall be made until the Building Official has issued a certificate of occupancy for said building or structure in accordance with the provisions of section R110.2. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the City. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the City shall not be valid."

- 16. Subsection R110.3 "Certificate Issued" is hereby amended to read as follow and section R110.4 "Temporary Occupancy" is deleted in its entirety:
- (a) The Building Official shall not issue a certificate of occupancy for any building or structure subject to this code when the Building Official has found violation(s) of any municipal code, county code or applicable state law provision related to any form of building or grading activity occurring on the subject property.

(b) If the Building Official determines that a certificate of occupancy may be issued as in conformance with the requirements of this Code, the certificate shall

contain the following:

- 1. The building permit number;
- 2. The address of the building:
- 3. The name and address of the owner:
- 4. A description of that portion of the building for which the C of O is issued;
- 5. A statement that the described portion of the building has been inspected for Compliance with the requirements of this code for the group and division of Occupancy and the use;
- 6. The name of the Building Official.

(c) Exception: A certificate of occupancy may be issued by the Building Official in those instances where the Building Official finds and determines that the building or structure is otherwise completed but not all zoning conditions of approval have been satisfied and: i) occupancy will not otherwise constitute a threat to the public health and safety; ii) remaining work constitutes a very minor portion of the project; iii) the remaining work is secured by the posting of appropriate surety performance bonding as approved by the Building Official; iv) the applicant shall pay a required fee to process the exception application. This exception is not applicable where the work on the structure or building has not satisfied all requirements of this Building Code.

### 17. Subsection R110.5 "Revocation" is hereby amended to read as follows:

The Building Official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portions thereof is in violation of any City ordinance or regulation or any of the provisions of this code.

Chapter 2 Definitions is adopted in its entirety with the following amendment:

Section 202 Definitions is hereby revised by adding "Hazardous Fire Area" as follows:

HAZARDOUS FIRE AREA. Includes all areas identified within California Fire Code Section 4906.2 and other areas as determined by the Fire Code Official as presenting a fire hazard due to the presence of combustible vegetation, or the proximity of the property to an area that contains combustible vegetation.

18. Subsection R301.2 "Climatic and geographic design criteria" Table R301.2 (1) is hereby amended to read as follows:

# TABLE R301.2 (1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

	WIN	D DESIGN	SEISMIC	SUBJECT TO DAMAGE FROM				ICE BARRIER			
GROUND SNOW LOAD	Speed (mph)	Topographic effects *	DESIGN CATEGORY		Frost line Depth	Termite <sup>c</sup>	WINTER DESIGN TEMP®	UNDERLAY	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP <sup>j</sup>
Zero	85	No	D <sub>2</sub> or E	, Negligible	12-24"	Very Heavy	43	No	See Flood Maps	0	60

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)].

The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.

b. The frost line depth may require deeper footings than indicated in Figure R403.1 (1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.

c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite

damage.

d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R30I.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.

e. Temperatures shall be permitted to reflect local climates or local weather experience

as determined by the building official.

f. The jurisdiction shall fill in this part of the table with the seismic design category

determined from Section R301.2.2.1.

- g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
- h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3 (2) or from the I00-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32°)" at www.ncdc.noaa.gov/fpsf.html.

j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method

(Base 32°F)" at www.ncdc.noaa.gov/fpsf.html.

k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

R301.9 "Development on or Near Land Containing or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors", is hereby added as follows:

R301.9 Development on or Near Land Containing or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors The fire code official may require the submittal for approval of geological studies, evaluations, reports, remedial recommendations and/or similar documentation from a state-licensed and department-approved individual or firm, on any parcel of land to be developed which has, or is adjacent to, or within 1,000 feet (304.8 m) of a parcel of land that has an active, inactive, or abandoned oil or gas well operation,

petroleum or chemical refining facility, petroleum or chemical storage, or may contain or give off toxic, combustible or flammable liquids, gases or vapors.

Subsection R301.10 Fuel Modification Requirements for New Construction is hereby added as follows:

R301.10 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in areas with or adjacent to land having hazardous combustible vegetation shall comply with the requirements in the edition of OCFA Vegetation Management Guidelines currently in use at the time.

Section R309.6 Fire sprinkler attached garages, and carports with habitable space above is hereby amended by modifying the exception as follows:

**Exception:** An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing carports and/or garages that do not have an automatic fire sprinkler system installed unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8.

**R313.1 Townhouse automatic fire sprinklers systems.** An automatic residential fire sprinkler system installed in Townhouses as follows:

**New buildings:** An automatic sprinkler system shall be installed throughout all new buildings.

**Existing buildings:** An automatic sprinkler system shall be installed throughout when one of the following conditions exists:

- 1. When an addition is 50% or more of the existing building area, as defined in Section 502.1, and greater than 1000 square feet (92.903 m²) within a two year period; or Exception: When demonstrated to the fire code official that the hydraulic demand of the fire sprinkler system requires a water meter upgrade solely for the fire sprinkler system, and that upgrade requires replacement of the domestic lateral feed from the water main to the water meter solely for the fire sprinkler system, fire sprinklers shall not be required.
- 2. An addition when the existing building is already provided with automatic sprinklers; or
- 3. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

**Section R 313.2** is modified by deleting it in its entirety and replacing it with the following:

R313.2 One- and two-family dwellings automatic fire sprinklers systems. An automatic residential fire sprinkler system installed in Townhouses as follows:

New buildings: An automatic sprinkler system shall be installed throughout all new buildings.

**Existing buildings:** An automatic sprinkler system shall be installed throughout when one of the following conditions exists:

- 1. When an addition is 50% or more of the existing building area, as defined in Section 502.1, and greater than 1000 square feet (92.903 m²) within a two year period; or Exception: When demonstrated to the fire code official that the hydraulic demand of the fire sprinkler system requires a water meter upgrade solely for the fire sprinkler system, and that upgrade requires replacement of the domestic lateral feed from the water main to the water meter solely for the fire sprinkler system, fire sprinklers shall not be required.
- 2. An addition when the existing building is already provided with automatic sprinklers; or
- 3. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

**Section R313.3.6.2.2 Calculation procedure** is hereby revised as follows:

**Section R313.3.6.2.2 Calculation procedure.** Determination of the required size for water distribution piping shall be in accordance with the following procedure and California Fire Code Section 903.3.5.3.

Subsection R319.1 Site Address is revised to read as follows:

R319.1 Address numbers. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm) for R-3 occupancies, for all other occupancies the numbers shall be a minimum of 6 inches high with a minimum stroke width of 1 inch. Where access is by a private road and the building cannot be viewed from the *public way*, a monument, pole or other sign or means shall be used to identify the structure.

Section R327.1.6 Fuel Modification Requirements for New Construction is hereby added as follows:

R327.1.6 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in hazardous fire areas shall comply with the

following:

- 6. Preliminary fuel modification plans shall be submitted to and approved by the fire code official concurrent with the submittal for approval of any tentative map.
- 7. Final fuel modification plans shall be submitted to and approved by the fire code official prior to the issuance of a grading permit.
- 2.1 The fuel modification plan shall include provisions for the maintenance of the fuel modification for perpetuity.
  - 8. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of the Orange County Fire Authority Vegetation Management Guidelines.
  - 9. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification areas shall have prior approval from the fire code official.
  - 10. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in the Fire Code.

Section R403.1.3 Seismic reinforcing is modified by deleting the exception for masonry stem walls:

In Seismic Design Categories  $D_0$ ,  $D_1$  and  $D_2$  masonry stem walls without solid grout and vertical reinforcing are not permitted.

Section R902 ROOFING CLASSIFICATION is hereby amended to read as follows:

R902.1 Roofing covering materials. Roofs shall be covered with materials as set forth in Sections R904 and R905. Minimum Class A roofing shall be installed in areas designated by this section. Classes A roofing required by this section to be listed shall be tested in accordance with UL 790 or ASTM E 108.

**Exceptions:** 

- 1. Class A roof assemblies include those with coverings of brick, masonry and exposed concrete roof deck.
- Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.

R902.1.3 Roof coverings within all other areas. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A.

R902.2, first paragraph is amended by revising it to allow only Class A treated wood roofs as follows:

R902.2 Fire-retardant-treated shingles and shakes. Fire-retardant-treated wood shakes and shingles are wood shakes and shingles complying with UBC Standard 15-3 or 15-4 which are impregnated by the full-cell vacuum-pressure process with fire-retardant chemicals, and which have been qualified by UBC Standard 15-2 for use on Class A roofs.

**Chapter 10 Chimneys and Fireplaces** is adopted in its entirety with the addition of the following amendments:

Section R1001.13 Chimney spark arresters is hereby added as follows:

R1001.13 Chimney spark arresters. All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrester. Chimneys serving outdoor appliances or fireplaces shall be equipped with a spark arrester. The spark arrester shall meet the requirements of Section 2113.9.2 of the California Building Code.

California Residential Code, Chapter 44 Referenced Standards is adopted in its entirety with the following amendments:

NFPA 13R 2013 Edition, Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby amended as follows:

Section 6.16.1 is hereby revised as follows:

**6.16.1** A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2010 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

NFPA 13D 2013 Edition, Standard for the Installation of Sprinkler Systems in Oneand Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

## Section 4.1.3 is hereby added as follows:

## 4.1.3 Stock of Spare Sprinklers

#### Section 4.1.3.1 is hereby added as follows:

**4.1.3.1**. A supply of at least two sprinklers for each type shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

#### Section 4.1.3.2 is hereby added as follows:

**4.1.3.2** The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

#### Section 4.1.3.3 is hereby added as follows:

**4.1.3.3** The sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100 °F (38°C).

#### Section 4.1.3.4 is hereby added as follows:

**4.1.3.4** A special sprinkler wrench shall be provided and kept in the cabinet to be used in the removal and installation of sprinklers. One sprinkler wrench shall be provided for each type of sprinkler installed.

## Section 7.1.2 is hereby revised as follows:

**7.1.2** The system piping shall not have a separate control valve unless supervised by a central station, or remote station alarm service

## Section 7.6 is hereby deleted in its entirety and replaced as follows:

**7.6 Alarms.** Exterior alarm indicating device shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location is subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

#### Exception:

- 1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
- 2. When smoke detectors specified under CBC Section 907.2.11 are used to sound an alarm upon waterflow switch activation.

### Section 10. City Clerk's Certification

The City Clerk shall certify to the adoption of this Ordinance and cause the same to be posted at the duly designated posting places within the City and published once within (15) days after the passage and adoption as required by law; or, in the alternate, the City Clerk may cause to be published a summary of this Ordinance and a certified copy of the text of this Ordinance shall be posted in the Office of the City Clerk five (5) days prior to the date of adoption of this Ordinance; and, within fifteen (15) days after adoption, the City Clerk shall cause to be published the aforementioned summary and shall post a certified copy of this Ordinance, together with the vote for and against the same, in the Office of the City Clerk.

### Section 11. Severability

If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held out to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council of the City of San Juan Capistrano hereby declares that it would have adopted this ordinance and each section, subsection, sentence, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsection, sentence clause, phrases or portions be declared valid or unconstitutionally.

### Section 12. Local Findings

#### 1. Climatic Conditions:

- A. Orange County and the City of San Juan Capistrano are located in a semi-arid Mediterranean type climate. It annually experiences extended periods of high temperatures with little or no precipitation. Hot, dry (Santa Ana) winds, which may reach speeds of 70 M.P.H. or greater, are also common to the area. These climatic conditions cause extreme drying of vegetation and common building materials. Frequent periods of drought and low humidity add to the fire danger. This predisposes the area to large destructive fires (conflagration). In addition to directly damaging or destroying buildings, these fires are also prone to disrupt utility services throughout the County. Obstacles generated by a strong wind, such as fallen trees, street lights and utility poles will greatly impact the response time to reach an incident scene. Additionally, there is a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type firefighting apparatus above this height would place rescue personnel at increased risk of injury.
- B. The climate alternates between extended periods of drought and brief flooding conditions. Flood conditions may affect the Orange County Fire Authority's ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the County.
- C. Water demand in this densely populated area far exceeds the quantity supplied by natural precipitation; and although the population continues to grow, the already-taxed water supply does not. California is projected to increase in population by nearly 10 million over the next quarter of a century with 50 percent of that growth centered in Southern California. Due to storage capacities and consumption, and a limited amount of rainfall future water allocation is not fully dependable. This

necessitates the need for additional and on-site fire protection features. It would also leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of available water to floors in a fire.

D. These dry climatic conditions and winds contribute to the rapid spread of even small fires originating in high-density housing or vegetation. These fires spread very quickly and create a need for increased levels of fire protection. The added protection of fire sprinkler systems and other fire protection features will supplement normal fire department response by providing immediate protection for the building occupants and by containing and controlling the fire spread to the area of origin. Fire sprinkler systems will also reduce the use of water for firefighting by as much as 50 to 75 percent.

## 2. Topographical Conditions:

A. Natural slopes of 15 percent or greater generally occur throughout the foothills of Orange County. The elevation change cause by the hills creates the geological foundation on which communities within Orange County are built and will continue to be built. With much of the populated flatlands already built upon, future growth will occur in areas with steeper slopes and greater constraints in terrain.

B. Road circulation features located throughout the County also make amendments reasonably necessary. Located through the County are major roadways, highways and flood control channels that create barriers and slow response times. Hills, slopes, street and storm drain design accompanied with occasional heavy rainfall, cause roadway flooding and landslides, and at times may make an emergency access route impassable. There are areas in Orange County that naturally have extended Fire Department emergency response times that exceed the 5 minute goal.

C. Placement of multiple occupancy buildings, location of arterial roads, and fire department staffing constraints due to recent revenue-limiting state legislation have made it difficult for the fire department to locate additional fire stations and provide manpower sufficient to concentrate fire companies and personnel to control fires in high density apartment or condominium buildings. Fire Department equipment does not allow easy access to areas of buildings greater than 55 feet above the level of Fire Department vehicle access. These conditions create the need for built-in on-site fire protection systems to protect occupants and property until firefighting apparatus and personnel arrive on the scene.

These topographical conditions combine to create a situation, which places fire department response time to fire occurrences at risk, and makes it necessary to provide automatic on-site fire-extinguishing systems and other protection measures to protect occupants and property.

# 3. Geological Conditions:

A. Orange County and the City of San Juan Capistrano are located in a highly active seismic area. There are earthquake faults that run along both the northeastern and southwestern boundaries of Orange County. The Newport-Inglewood Fault Zone (NIFZ) which runs through Orange County was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude, hypocenter off Newport Beach coast), which took 120 lives, with areas damaged from Laguna Beach to Marina del Rey and

inland to Whittier, and poses one of the greatest hazards to lives and property in the nation. Regional planning for reoccurrence is recommended by the State of California, Department of Conservation. There was also an earthquake in December 1989, with the epicenter located near the City of Irvine. The fault on which this quake occurred was unknown prior to this activity. The October 17, 1989, Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district, but when combined with the 34 other fires and over 500 responses, the department was taxed to its full capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. Experts predict a major earthquake in our area within the next 50 years. This situation creates the need for both additional fire protection measures and automatic on-site fire protection for building occupants since a multitude of fires may result from breakage of gas and electric lines as a result of an earthquake. As noted by "Planning Scenario on a Major Earthquake on the Newport-Inglewood Fault Zone, 1988, State Department of Conservation," page 59, "unfortunately, barely meeting the minimum earthquake standards of building codes places a building on the verge of being legally unsafe."

- B. Traffic and circulation congestion presently existing in the City of San Juan Capistrano often places fire department response time to fire occurrences at risk. This condition will be exacerbated by any major disaster, including any earthquake wherein damage to the highway system will occur. This condition makes the need for additional on-site protection for property occupants necessary.
- C. The City of San Juan Capistrano is located in an area subject to a climatic condition of high winds and low humidity. This combination of events creates an environment, which is conducive to rapidly spreading fires. Control of such fires requires rapid response. Obstacles generated by a strong wind, such as fallen trees, street lights and utility poles, and the requirement to climb 75 feet vertically up flights of stairs will greatly impact the response time to reach an incident scene. Additionally, Section 6, Figure 6-2 of ASCE 7 identifies a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type firefighting apparatus above this height would place rescue personnel at increased risk of injury.
- D. The City of San Juan Capistrano is located in the middle of the seismically active area. The viability of the public water system would be questionable at best after a major seismic event. This would leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of any available water to floors above the 55-foot level. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks there exists a need to provide increased protection for anyone on upper floors.
- E. Untreated wood roofs cause or contribute to serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds. Pieces of burning wooden roofs become flying brands and are carried by the wind to other locations and thereby spread fire quickly. Recent Grand Jury Report findings support this concern.
- F. Soils throughout the County possess corrosive properties that reduce the expected usable life of water services when metallic pipes in contact with soils are utilized.

**PASSED AND ADOPTED** at a regular meeting of the City Council of the City of San Juan Capistrano held on the 17<sup>th</sup> the day of December 2013.

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	,	Şam Allevato, Mayor
	Mus	
Maria Morri	s, City Clerk	

STATE OF CALIFORNIA	)
COUNTY OF ORANGE	)SS
CITY OF SAN JUAN CAPISTRANO	)

I, MARIA MORRIS, appointed City Clerk of the City of San Juan Capistrano, do hereby certify that the foregoing is a true and correct copy of **Ordinance No. 1005** which was regularly introduced and placed upon its first reading at the Regular Meeting of the City Council on the 3<sup>rd</sup> day of December 2013, and that thereafter, said Ordinance was duly adopted and passed at the Regular Meeting of the City Council on the 17<sup>rd</sup> day of December 2013, by the following vote, to wit:

AYES: OUNCIL MEMBERS: Byrnes, Reeve, Taylor, Kramer and Mayor Allevato

NOES COUNCIL MEMBERS: None ABSENT: COUNCIL MEMBERS: None

MARIA MORRIS, CITY CLERK

STATE OF CALIFORNIA COUNTY OF ORANGE CITY OF SAN JUAN CAPISTRANO	) ) ss )	AFFIDAVIT OF POSTING
I, MARIA MORRIS, declare as follows:		
That I am the duly appointed and qualification (Capistrano); That in compliance with State of California, on the 5 <sup>th</sup> day of adoption of the ordinance, I caused to be ordinance entitled:	ate laws Decem	, Government Code section 36933(1) of ber 2013, at least 5 days prior to the
CAPISTRANO, CALIFORNIA, TITLE 8 OF THE SAN JUAN	<b>AMEN</b>	TRANO MUNICIPAL CODE BY THE CALIFORNIA BUILDING

This document was posted in the Office of the City

CODE APPENDICES AND AMENDMENTS THERET

> MARIA MORRIS, CITY CLERK San Juan Capistrano, Califòrnia

STATE OF CALIFORNIA **COUNTY OF ORANGE** 88 CITY OF SAN JUAN CAPISTRANO

AFFIDAVIT OF POSTING

# I. MARIA MORRIS, declare as follows:

That I am the duly appointed and qualified City Clerk of the City of San Juan Capistrano; that in compliance with State laws, Government Code section 36933(1) of the State of California.

On the 19th day of December 2013, I caused to be posted a certified copy of Ordinance No. 1005, adopted by the City Council on December 17, 2013, entitled:

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAN JUAN CAPISTRANO, CALIFORNIA, AMENDING SPECIFIC SECTIONS OF TITLE 8 OF THE SAN JUAN CAPISTRANO MUNICIPAL CODE BY ADOPTING THE 2013 EDITIONS OF THE CALIFORNIA BUILDING STANDARDS CODE AND RELATED MODEL CODES WITH APPENDICES AND AMENDMENTS THERETO

This document was posted in the Office of the City/Clefk

MARIA MORRIS, CITY CLERK San Juan Capistrano, California